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| Logo Fulton Hogan AUS_CMYK_150dpi | | **Inspection and Test Plan - Control and Supervision of the Works** | | | | | | | | **Document #**  **FHC-ITP-005** | | |
| Revision : 2 | Date : 24/01/2024 | |
|  | | | | | | | | | | | | |
| **Client:** | **MRPA** |  | **Construction Process:** |  | Prepared by: |  | Reviewed by : | |  | Approved by : |  |  |
| **Project:** | **FITZGERALD ROAD CARPARK** | | ***Class 2 Crushed Rock*** |  | Name: **Fynn Riddick** | | Name: Justin Sciacca | |  | Name: |  |  |
| **Job No:** |  | | **Specifications:** VicRoads Specification Section 173 , 304, 204, VR Code of Practice RC 500.02 | |  |  |  | |  |  |  |  |
|  |  | | **Structure / Component:** Pavement |  | Signed : |  | Signed : | |  | Signed : |  |  |
|  |  | | **Location:** Fitzgerald Road Level Crossing Removal Project |  | Date : 18/01/2024 | | Date : 25/01/24 | |  | Date : |  |  |
|  | | | | | | | | | | | | |
| **Lot No:** |  | **Lot Details:** |  |  |  |  | **Lot Size/ Quantity:** | | |  |  |  |
|  | | | | | | | | | | | | |
| **Item** | **Task/Activity Description** | **Inspection / Controls and Verification Detail** | | | | | **HP/ WP/ AP/ IP/ TP/ SCP** | **Responsibility** | **Checked by:** | | | |
| **No.** | **Frequency** | **Acceptance Criteria** | **Reference Documents** | **Inspection / Test Method** | **Record of conformity** | Project Engineer Site Engineer Superintendent Surveyor Foreman | **Client** | **Fulton Hogan** | **FH's Sub- contractor** | **Date** |
| **1** | **Preliminary Works** | | | | | | | | | | | |
| 1.1 | Check for correct documentation | Prior to commencing any activity | Ensure that all employees and subcontractors are:   * Using the correct and complete set of drawings * All drawings are the latest revision | Drawings and drawing registers | Visual inspection | This ITP signed | **HP\*** | Site Engineer / Site Foreman | N/A |  | N/A |  |
| 1.2 | Material Mix Design | Prior to commencing any activity | Crushed rock mixes proposed for use on specified works shall be registered in accordance with VicRoads Code of Practice for Registration of Crushed Rock Mixes RC500.02 as listed in Section 175 | Cl 812.04  RC 500.02 | Document Review | Mix Design VicRoads Approval | **HP\*** | Site Engineer |  |  | N/A |  |
| 1.3 | Implementation of all measures and controls | Prior to commencing any activity | All necessary measures and controls are being implemented, that is: OHSCP, PHSCP, PCMP, EMP, ECP, CEMP, ERA, QMP, CHMP, SWMS | OHSCP, PHSCP, PCMP, EMP, ECP, CEMP, ERA, QMP, CHMP, SWMS | Visual Inspection | This ITP signed | **HP\*** | Site Engineer / Site Foreman | N/A |  | N/A |  |
| **2** | **Construction Works** | | | | | | | | | | | |
| 2.1 | Transverse Joints | Check prior to placing material | Material should be spread to minimize number of joints. Transverse joints shall be offset from one layer to next by not less than 2 metres | Cl.304.07 (a)  Cl.304.07 (c) | Visual Inspection | This ITP signed off | **IP** | Site Engineer | N/A |  | N/A |  |
| 2.2 | Longitudinal Joints | Check prior to placing material | Material should be spread to minimize number of joints. Longitudinal joints offset from one layer to next by not less than 150mm. Longitudinal joints to be located within 300mm from planned traffic lane lines or within 300 mm of the centre of a traffic lane. | Cl.304.07 (a)  Cl.304.07 (d)  Cl.304.07 (e) | Visual Inspection | This ITP signed off | **IP** | Site Engineer | N/A |  | N/A |  |
| 2.3 | Lot Size | Check prior to placing material | A single lot shall be considered a single layer of 4000m2 or one days production in a single layer, whichever is lesser. | . Cl.304.08 (b)(ii)  Table 304.111 | Site Inspection | Signed ITP | **IP** | Site Engineer | N/A |  | N/A |  |
| 2.4 | Layer Thickness | Each Lot | The maximum thickness of any pavement base layer shall not exceed 150 mm and the maximum thickness of any subbase layer shall not exceed 200 mm. The minimum thickness of any pavement layer shall be 4 times the nominal size of the material. | Cl 304.08(b)(v)  Cl 304.08(b)(vi) | Site Inspection | Signed ITP | **IP** | Site Engineer | N/A |  | N/A |  |
| 2.5 | Proof Rolling | Proof Roll each layer | No visible deformation or springing in presence of Superintendent's Rep.( Cl 173) Plant to comply with requirements of Cl 173.03. | 173.03 | Visual inspection | This ITP signed off | **HP/ WP** | Site Engineer & Superintendent |  |  | N/A |  |
| **3** | **Testing Requirements** | | | | | | | | | | | |

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| **No.** | **Frequency** | **Acceptance Criteria** | **Reference Documents** | **Inspection / Test Method** | **Record of conformity** | Project Engineer  Site Engineer Superintendent Surveyor Foreman | **Client** | **Fulton Hogan** | **FH's Sub- contractor** | **Date** |
| 3.1 | Determine Testing Scale & Initial Testing Frequency | Prior to Testing | The Contractor shall initially test every lot for acceptance of compaction in accordance with the requirements of the Specification. Testing of every lot shall continue until three consecutive lots of like material and/or work have achieved the standards specified.  Scale B - The first lot of each pavement course shall be tested for post-compaction grading and PI. If the first lot each pavement course satisfies the specified post compaction requirements in Clause 304.10(a) and (b), as applicable, no further post- compaction testing will be required for that pavement course. | Table 204.161 Cl.304.08 (a)  Cl.304.11 (b) Cl.304.11 (c)(i)  Table 304.111 | Document Review/ Site Inspection | Signed ITP | **AP** | Project Engineer | N/A |  | N/A |  |
| 3.2 | Compaction Testing | Every Lot  Every second lot (reduced frequency) | Minimum Characteristic Density Ratio (CDR) of not less than 98%, using Modified compaction effort. | Cl304.08  Table 3040.061  Cl 304.11 (b)  Table 304.111 | Test point | This ITP signed off; Test reports | **TP** | Site Engineer | N/A |  | N/A |  |
| 3.3 | Compaction Testing (Small Lots) | Each Lot | Any lot which has a surface area less than 500 m2 may be treated as a small area. Acceptance of the lot shall be based on the mean values of 3 individual tests. Minimum Compaction shall be 100% modified compaction effort. | 173.04 d | Test Point | Test Records Lot Register | **TP** | Site Engineer | N/A |  | N/A |  |
| 3.4 | Material Grading - Post Compaction (Class 2 & 3 Only) | First Lot Only | Post compaction material grading results must comply with the following: Class 4 - N/A  Class 3 - As per Table 304.101 - VR Spec. 304.10  Class 2 - As per Table 304.101 - VR Spec. 304.10 | Cl 304.101  Cl 304.111 | Test point | This ITP signed off; Test reports | **TP** | Site Engineer | N/A |  | N/A |  |
| 3.5 | Plasticity Index - Post Compaction (Class 2 & 3 Only) | First Lot Only | Post compaction PI results must comply with the following: Class 4 - N/A  Class 3 - 0 to 10  Class 2 - 0 to 6 | Cl 304.10  Cl 304.11  Table 304.103 | Test point | This ITP signed off; Test reports | **TP** | Site Engineer | N/A |  | N/A |  |

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| 3.6 | Survey Conformance | | Each lot | Layer to be finished to a smooth and uniform surface and after compaction shall conform within the following limits:  Shape: no point deviation > 8mm from 3m straight edge in any direction Surface level tolerances:  **Range x = +6, -16mm Max S = 15 mm**  40 measurements per lot (Minimum) | Cl 304.06(b, d, i)  Drawings Table 304.062 | Survey | This ITP signed off; Survey Report | **SCP** | Site Engineer/ Surveyor | N/A |  | N/A |  |
|  | | | | | | | | | | | | | |
|  | **Final Inspection** |  |  |  |  |  |  |  |  |  |  |  |  |
| The signature below verifies that this ITP has been completed in accordance with the FH’s Quality system Procedures and verifies lot compliance with specifications. | | | | | | | | | | | | | |
|  | Print Name: |  | Position: |  | Signature: |  |  |  |  | Date: / / | |  |  |
|  | | | | | | | | | | | | | |
| ***Legend*** | | | | | | | | | | | | | |
| **HP** | Hold Point | Work shall not proceed past the HP until released by the Superintendent | | | **IP** | Inspection point | | Formal Inspection to be done and recorded | | | |  |  |
| **HP\*** | FH Hold Point | Work shall not proceed past the HP\* until released by FH | | | **TP** | Test Point |  | Product compliance test to be undertaken and recorded/reported | | | | |  |
| **WP** | Witness Point | An inspection which must be witnessed by the Superintendent | | | **SCP** | Survey conformance point | | A qualified surveyor to check product/section/structure and report | | | | |  |
| **AP** | Approval Point | Written or verbal approval given by the Superintendent | | |  | | | | | | | | |